

DATE: September 18, 2000

TO: Natural Resources Board

FROM: George E. Meyer

SUBJECT: Petition for the Adoption of Rules to Govern Mercury Emissions to the Air and Specifically Requiring Reductions from the Largest Sources of Mercury Emissions Which Contribute to Mercury Deposition to Wisconsin Lakes and Rivers

On May 18, 2000, the Department received a petition under s. 227.11(2)(a) and 227.12, Wis. Stats., to adopt rules requiring reductions in mercury emissions to the air. The petition, signed by several legislators and representatives of a number of environmental organizations, conservation groups and sportsmen clubs, asked the Department to conduct rule-making to "require the reduction of mercury emissions to the air, which are subsequently deposited in surface waters and bioconcentrate in game fish, from the largest known sources of such emissions".

On September 18, 2000, the Department received an amended petition signed by additional petitioners and advancing the deadline date for achieving emission reductions of mercury of at least 90% by 2010 (compared to 2015 as requested in the original petition).

Under s. 227.13, Wis. Stats., the Department is required, within a reasonable period of time after receipt of the petition, to deny the petition in writing or to proceed with the requested rule-making. The Department staff is reviewing the petition, as recently amended, and expects to make a presentation to the Board at its October, 2000 meeting and a recommendation for Department action on the petitions. .

The original petition and the amended petition are attached for your information and as background for the Department staff's presentation and recommendation at next month's Board meeting. .

Attachments

**Before The State of Wisconsin
Department of Natural Resources**

PETITION BY CITIZENS FOR THE ADOPTION OF RULES TO GOVERN MERCURY EMISSIONS
TO THE AIR AND SPECIFICALLY REQUIRING REDUCTIONS FROM THE LARGEST SOURCES
OF MERCURY EMISSIONS WHICH CONTRIBUTE TO MERCURY DEPOSITION TO WISCONSIN
LAKES AND RIVERS

Citizen Petition for Rules Docket No. _____

TO : Secretary of the Department of Natural Resources, and the Natural Resources Board
P.O. Box 7921
Madison, Wisconsin 53707

The undersigned citizens of the State of Wisconsin hereby petition the Wisconsin Department of Natural Resources (WDNR) and the Natural Resources Board to conduct rulemaking to adopt administrative rules which require the reduction of mercury emissions to the air, which are subsequently deposited in surface waters and bioconcentrate in game fish. from the largest known sources of such emissions under the authority given to the Department in section 285.11 (9) Wis. Stats.

This petition is filed pursuant to the provisions of 227.11 (2) (a) and 227.12 (1) and (2) , Wis. Stats., and Wisconsin Administrative Code NR 2.05. A petition for rulemaking must state the substance or nature of the rule requested, the reason for the request, the petitioners' interest in the requested rule, and a reference to the agency's authority to promulgate the requested rule, 227.12 (2), Wis. Stats. This petition fulfills these requirements and describes why rules are urgently needed.

I. PETITIONERS

Petitioner Keith Reopelle joins in this petition individually as a long-time Wisconsin angler with young children in his family and in his capacity as Program Director of Wisconsin's Environmental Decade (WED). WED is a nonprofit public interest organization concerned with the protection and improvement of Wisconsin's lakes, rivers, wildlife and public health. WED has approximately 25,000 members statewide, many of which have a vested interest in clean lakes and rivers and their ability to utilize fish and wildlife resources as a source of both enjoyment and food for their families.

Petitioner Chuck Rolfsmeyer joins this petition as the President of the Wisconsin State B.A.S.S. Federation. The B.A.S.S. Federation believes that it is the responsibility of the state and state natural resources agencies to uphold the public trust doctrine as it applies to lakes and rivers of the state. The B.A.S.S. Federation also believes the public trust doctrine does little good if the state agencies are not able to take the necessary actions needed to keep waters clean and fish safe to eat. It further maintains that the mercury emission rules requested in this petition are critical to make game fish safe to eat and to avoid the adverse health impacts of this highly toxic metal which threatens anglers and their families.

Petitioner Bob Elliker joins this petition as President of the Wisconsin Division of the Izaak Walton League of America, representing 1,000 members in Wisconsin. The pledge of the Izaak Walton League, a national conservation organization, many of whose members are hunters and fishers begins "To Strive for the purity of water, the clarity of air, and the wise stewardship of the land and its resources...". This pledge helps bring meaning to the Wisconsin Division of the Izaak Walton League's strong desire that the DNR rulemaking begin quickly to create caps and reductions of mercury emissions. This will be the star! of reducing the health hazard of mercury concentrations present today in the environment.

Petitioner Ted Lind joins in this petition individually as a life-long angler and as President of the Wisconsin Council of Sport Fishing Organizations' (WCSFO). The WCSFO serves as a voice for its more than 50 sport fishing organization members, behalf of those members, WCSFO strongly supports the requested rules recognizing that making sport fish safe for children and future generations is critical to ensuring a bright future for sport fishing in Wisconsin.

Petitioner William Kordus joins in this petition individually as a long-time angler with two properties on and near two separate water-bodies, both of which are listed on the DNR's fish consumption advisory. He also joins this petition as the representative for the Twin City Rod and Gun Club of Neenah/Menasha, whose membership of 3,600 consists of anglers and hunters concerned with the negative impacts mercury has on human health and the health of fish and wildlife.

Petitioners John and Linda Badagliacco join in this petition as owners of the Blueberry Hill Resort in Couderay, Wisconsin. Their livelihood depends upon tourism in Northern Wisconsin, much of which is based upon fishing and natural resources. They are concerned that the increasing number of lakes listed on the fish consumption advisory for mercury will have an adverse impact on their business.

Petitioner Gary Engberg joins in this petition as a professional angler, fishing guide and owner of Gary Engberg Outdoors, an outdoor production company. He is one of many licensed fishing guides whose economic livelihood relies on a healthy fish population. Gary guides on many waters with fish consumption advisories for mercury including lakes Monona, Waubesa, the Wisconsin River and its flowages, and knows firsthand that reducing mercury emissions is critical to the future of Wisconsin's sport fishing economy.

Petitioner Russ Ruland joins in this petition individually as a lifelong Wisconsin fisherman who is concerned about the danger of eating fish from Wisconsin waters. As President, and on behalf, of the 150 member Muskellunge Club of Wisconsin, he is also concerned, about the effect of mercury contamination on the natural reproductive capacity of our fish and wildlife. .

Petitioner Emily Kordus joins in this petition individually as an avid angler who is concerned with the negative health impacts consumption of high mercury fish has on fetuses and children. She is very concerned not only for herself as someone interested in having children in the future, but especially for the overwhelming majority of women who are not aware of the dangers mercury poses to their present and future children. .

Petitioner Martha Kilishek joins in this petition individually as a angler who enjoys teaching her two young grandchildren to fish and believes the impact from mercury pollution may prohibit these children from enjoying eating the fish they are learning to catch. She has property on a lake in northern Wisconsin and hopes our "Clean the Rain" campaign will improve Wisconsin waters. She is President of the Wisconsin Wildlife Federation whose broad objectives are to create and encourage an awareness of the need for wise use and proper management of our resources upon which the lives and welfare of all Wisconsinites, wildlife and fisheries depend-the soils, plant life, minerals, air and water. This organization of over 9,000 has an Environmental Committee, which has studied the mercury emissions in depth and strongly supports, this petition.

Petitioner Donna Wilcox joins in this petition individually and also as Secretary of the Last Wilderness Conservation Association, Inc., of Vilas County, Wisconsin, whose mission is "To conserve, enhance, and protect our natural resources through education, communication and the promotion of sound environmental practices." Donna is an avid angler who is concerned with the negative health impacts consumption of high mercury fish has on wildlife and humans alike, especially fetuses and children. She is very concerned not only for herself as someone who has small children, but especially for the overwhelming majority of men, women and children who are not aware of the dangers mercury poses to their present lives and to our future generations to come.

Petitioner Jim Wise joins in this petition as the president of Environmentally Concerned Citizens of Lakeland Area (ECCOLA) located in the North Central lake district of Wisconsin. The 400 member ECCOLA was formed in 1992 as a result of threats to the numerous lakes in Lincoln, Vilas and Oneida Counties. A great many of the lakes on the Wisconsin mercury advisory list are located in these three counties. He is also co-owner of a retail outdoor clothing and equipment store and has worked on many tourism related programs with the local Chamber of Commerce. Mercury pollution is viewed as a serious threat to the health of humans and wildlife, as well as the tourist economy.

Petitioner Ann T. Behrnnann, M.D., joins in this petition as a Wisconsin Pediatrician, a mother and on behalf of the Steering Committee of Madison Physicians for Social Responsibility. with recognition that methylmercury is a potent neurotoxin that causes irreparable damage to the developing human nervous system. Ingestion of contaminated freshwater fish by pregnant women or small children can result in brain damage to these vulnerable populations. Wisconsin has the opportunity with this petition to markedly decrease the risk of mercury poisoning for our future generations.

Petitioner Eric Uram joins this petition as a life-long angler and Associate Representative for the Midwest Office of the Sierra Club. The Sierra Club represents over 600,000 members nationally dedicated to protecting the environment for our families, for our future; this includes taking measures to prevent releases of toxic chemicals and elements, including mercury I that threaten the health of the public and the environment. Since no mercury advisory for fish consumption has ever been removed from any Wisconsin waters once listed, he desires that the WI DNR take immediate action to reduce the amount of mercury released into the environment from all sources under their jurisdiction. And further, to achieve virtual elimination of all anthropogenic mercury releases in the Lake Superior airshed by the year 2020 as stated in the goals of the International Joint Commission's Binational Program to protect Lake Superior.

Petitioner Gary Werner joins this petition as the Conservation Chair of the state chapter of the Sierra Club, known as the John Muir Chapter, with over 10,000 active members residing in Wisconsin. A lifelong naturalist and founder of the Sierra Club, John Muir lived in Wisconsin and worked throughout

his life to protect and preserve that which nature had given. Included in those protections were the health and welfare of the land and all its inhabitants. As Conservation Chair, Gary Werner continues to work for this. Mercury pollution threatens humans and all other life with its toxic legacy, which as an element, doesn't break down. Continued emissions of mercury will only increase the environmental burden, increasing threats to all life. He desires that the WI DNR to take all steps in their power to eliminate all mercury releases and help create a non-threatening environment for all life.

Petitioner Brian Burke joins in this petition as a Wisconsin resident and in his capacity as a member of the Wisconsin State Senate. As a state legislator, he is charged with promoting and enacting public policies that protect the health and safety of residents of the 3rd Senate District and the entire state.

Petitioner Representative Dean Kaufert joins this petition as a resident of the state and a supporter of conservation policies in the Neenah-Menasha area and the state as a whole.

Petitioner Spencer Black joins the petition as the state Representative for the 77th Assembly District. Black represents numerous constituents who fish in lakes Monona and Waubesa which are both listed on the DNR's fish consumption advisory. These constituents are limited in their enjoyment of the lakes because of the limits on fish consumption contained in the DNR advisory.

Petitioner Joe Handrick is a lifelong resident of Oneida County. and represents Oneida and Vilas counties in the State Assembly. As a representative of the nation's largest concentration of inland lakes, Joe joins in this petition.

II. NATURE OF THE REQUESTED RULES

The petitioners request Wisconsin DNR and the Natural Resources Board to promulgate the following:

1) A rule which creates a comprehensive program in the DNR for addressing mercury in the environment including:

- mercury deposition and monitoring activities --other mercury research
- public information and education outreach in coordination with the Health Dept. -technical assistance for stationary sources of mercury
- cooperative mercury reduction activities with neighboring states and federal government
- activities to reduce mercury emissions from small (purposeful use) sources -activities to address problems associated with long-term storage of mercury -activities to address the effectiveness of this program for reducing mercury in the environment
- activities to minimize the release of mercury into the environment from coal ash and other solid waste streams
- any other component identified by the Department

2) A rule which requires the Department to appoint a mercury control council of up to 12 members, including representatives from environmental and sport fishing organizations, Wisconsin Waters) which currently warns anglers and their families to not eat certain fish from 341 lakes and rivers (approximately one out of every three tested) due to unsafe levels of mercury contamination. This list will continue to grow as the Department continues to test additional lakes. Approximately one out of every three lakes tested ends up on the advisory.

2) The Health Department warns pregnant women not to eat certain large game fish from all Wisconsin lakes that have not been tested.

3) The most common fish species listed on the health advisory is walleye which is also one of the most sought after game fish for eating.

4) Mercury is a neuro-toxin which means that it adversely impacts the brain and nervous system making small children and pregnant women and their fetuses particularly susceptible to mercury poisoning.

- 5) Mercury stays in the body for a relatively long period of time (half life of 30 to 120 days) so that mercury contaminated fish meals eaten prior to pregnancy can impact the fetus.
- 6) Chronic exposure to mercury contaminated fish prior to or during pregnancy can result in infants and children with lower I.Q.s, reduced attention span, reduced memory capacity, reduced motor skills, and other mental and physical impairments.
- 7) Acute exposure to mercury contaminated fish prior to or during pregnancy can result in infants with severe mental and physical retardation.
- 8) Acute exposure to mercury contaminated fish in Wisconsin has led to at least one case of acute mercury poisoning where the individual, Henry Henk (Hayward), lost 100 pounds of weight, lost the use of his legs, suffered severe dementia (didn't recognize his own wife), and nearly died.
- 9) Fish consumption is the route of human exposure to mercury of greatest concern and there are currently no regulations of mercury emissions which take this route of exposure into account.
- 10) The presence of mercury in combination with other contaminants found in Wisconsin fish, such as PCBs, increases the likelihood of adverse health impacts at lower levels of mercury contamination.
- 11) Levels of mercury found in commercially sold fish in stores or restaurants (e.g. canned ~ are, on average, about half of what they are in fish caught from Wisconsin waters listed on the health advisory. The fish consumption advisory assumes no consumption of no commercially sold fish, underestimating the risk for anyone who does eat fish from the store or a restaurant.
- 12) The Department of Natural Resources sells over 1 million fishing licenses but only publishes 40,000 fish consumption advisories. The vast majority of anglers and their families never see the fish consumption warnings for mercury contamination.
- 13) The U.S. Environmental Protection Agency (EPA), Northeast States for Coordinated Air Use Management (NESCAUM) and other government agencies have identified numerous mercury removal control technologies currently available for electricity generating boilers including coal cleaning, wet scrubbers, dry scrubbers, fabric filters, combined ESP/baghouse and other combinations of existing technologies.
- 14) Studies have linked mercury contamination to impaired reproduction in wildlife particularly loons and other fish-eating species.
- 15) In at least one DNR research project, reduced hatching success and reduced survival of embryos were associated with high mercury concentrations in walleye eggs from two northern Wisconsin lakes.
- 16) Nearly, two million people fish in Wisconsin and spend nearly \$1 billion each year. In 1996, fishing license sales alone totaled \$26 million. More than 30,000 jobs in the state depend on sport fishing; sport fishing in Wisconsin depends on clean lakes, clean rivers and clean fish.
- 17) Certain cultures are at greater risk of adverse health impacts resulting from consumption of mercury contaminated fish due to their tendency to engage in semi- subsistence fishing. Certain Native American tribes, for example, rely heavily on game fish as a food source, as do certain Hmong communities.
- 18) More than 100 organizations have passed resolutions (see attached) supporting a policy to reduce mercury emissions in Wisconsin, including more than 40 sport fishing organizations, numerous lake associations, environmental groups, resort owners, Native American tribes and other groups representing communities of color which are disproportionately impacted by mercury contaminated fish.

16) Until states with the greatest mercury contamination in lakes and fish {e.g. Wisconsin}, and therefore extensive fish consumption advisories, take action to reduce their own mercury *emissions*, there is little hope of receiving cooperation from upwind states with few, if any, fish consumption advisories {e.g. Illinois, Missouri, Texas, etc.).

IV. AGENCY AUTHORITY TO ADOPT REQUESTED RULES

The Department of Natural Resources is provided with direct and clear authority to promulgate the rules requested in this petition under 285.11 (9) Wis. Stats., which instructs the Department to "Prepare and adopt minimum standards for the emission of mercury compounds or metallic mercury into the air." The bill which created this law was 1971 Assembly Bill 556, introduced by (then) Representative Tommy G. Thompson and two other legislators. The bill was clearly in response to high levels of mercury in Wisconsin River fish which prompted Governor Warren Knowles to close 40 miles of the Wisconsin River to fishing for two months in 1970.

The law created by this bill, Chapter 272, Laws of 1971, had three components: one restricting mercury discharges to the water, one requiring a materials balance sheet for purposeful use of mercury (addressing disposal), and a third (section 1, 144.422) requiring that the department "prepare and adopt minimum standards for the emission of mercury compounds or metallic mercury into the air." This requirement creates clear and direct authority for the DNR to promulgate the rules requested in this citizens' petition.

The Department did adopt mercury air emission standards in response to the passage of this law. However, the current air toxics standards are intended, by design, to only address health impacts resulting from direct air inhalation of mercury, in fact, have resulted in no reductions of mercury air emissions. The Department has had the authority to promulgate mercury air emission rules addressing mercury contamination in fish for the past 29 years, but has failed to do so. This is not entirely surprising given the difference in the state of researchers' understanding of mercury in the environment between then and now. In 1971, researchers and policy makers alike had little idea of the role mercury deposition played in the contamination of fish. The fact that a mercury limit addressing inhalation has already been established by the Department in no way prevents the Department from establishing a stricter standard addressing air deposition and the fish consumption route of exposure. The Department clearly must address air deposition in order to protect human health, fish and wildlife since fish consumption is the exposure route of greatest concern on the part of state health officials.

Assembly Bill 556 (of 1971) as introduced, only addressed direct mercury discharges to the water. However, the Assembly Natural Resources Committee adopted a substitute amendment (which became law) which broadened the bill to include solid waste disposal and air emissions, recognizing, to some extent, that all mediums (water, air and land) are connected and affect each other. The substitute amendment was introduced by Representatives T. Thompson and L. Mittness.

The crux of the authority issue is that the law was clearly intended to reduce mercury levels in fish and clearly gave the department the authority to do this by regulating both water discharge and air emission sources of mercury. And, in fact, water discharge sources of mercury whether from industries or from municipalities, have been, in a relative sense, greatly reduced; while air emission sources have gone completely unchecked. The fact that mercury levels in Wisconsin lakes and rivers have remained high (i.e. unsafe to the extent described in the state's fish consumption advisory) for the past 30 years is consistent with what we have learned about the role and importance of mercury deposition.

The DNR has clear, unquestionable statutory authority to adopt the requested rules. For the reasons set forth above, Petitioners urge that the requested rules be promulgated with all due expedience.

Dated this 18th day of May, 2000.

Respectfully submitted:

Keith Reopelle
Keith Reopelle, Program Director
Wisconsin's Environmental Decade

Chuck Rolfsmeyer
Chuck Rolfsmeyer, President
Wisconsin State B.A.S.S. Federation

Gary Engberg
Gary Engberg
Gary Engberg Outdoors

Emily Kordus
Emily Kordus

Jim Wise
Jim Wise, President
Environmentally Concerned
Citizens of the Lakeland Area

Brian Burke
Brian Burke, State Senator

Spencer Black, State Representative

Ann T. Behrman M.D.
Ann T. Behrman, M.D.
Pediatrician

Eric Uram
Eric Uram
Sierra Club, Midwest Office

Gary Werner
Gary Werner, Conservation Chair
Sierra Club, John Muir Chapter

Wayne Stroessner
Wayne Stroessner, President
Random Lake Association

Bob Elliker
Bob Elliker, President
Wisconsin Division of the Izaak
Walton League of America

William Kordus
William Kordus, Vice President
Twin City Rod & Gun Club

Russ Ruland
Russ Ruland, President
Muskellunge Club of Wisconsin

Martha Kilishek
Martha Kilishek, President
Wisconsin Wildlife Federation

Donna Wilcox
Donna Wilcox, Secretary
Last Wilderness Conservation Association, Inc.

Dean Kaufert
Dean Kaufert, State Representative

Joe Handrick
Joe Handrick, State Representative

John & Linda Badagliacco
John & Linda Badagliacco, Owners
Blueberry Hill Resort

Ted Lind
Ted Lind, President
Wisconsin Council of Sport Fishing
Organizations

Over 100 Supporters of Mercury Cap and Reduction Legislation

hing/Conservation Groups	31. Sturgeon For Tomorrow	64. Citizens for a Better Environment	Communities of Color
Brillion Conservation Club	32. Saint Croix Bass Anglers	65. Citizens for Safe Water	87. Bad River Band of Lake Superior Tribe of Chippewas
Brown Co. Conservation Assn.	33. Twin City Rod and Gun Club	66. Citizens Protect West Twin River	88. Great Lakes Inter-Tribal Council (GLITC)
Coleman Sportsman's Club	34. Underhill Sportsmans Club	67. Citizens to Save Neenah Wetlands	89. Lac Courte Oreilles Tribal Council
Green Bay Area Great Lakes Sport Fishermen	35. Walleyes Unlimited	68. Clean Water Action Council of WI	90. Lac Vieux Desert Band of Lake Superior Chippewas
Hatfield Sportsmen's Club	36. Waupaca Bass Club	69. Door Co. Environmental Council	91. Red Cliff Band of Lake Superior Chippewa Indians
Hudson Rod and Gun Club	37. Westby Rod and Gun Club	70. Environmentally Concerned Citizens of Lakeland Area	92. St. Croix Tribal Council
Izaak Walton League—State Division	38. WI Council of Sportfishing Organizations	71. Gibraltar Preservation Council	93. WI Indian Education Assn.
Izaak Walton League—Brown Co.	39. WI B.A.S.S. Federation	72. Gray Panthers of WI	94. Hmong American Partnership Fox Valley, Inc.
Izaak Walton League—Green Lk. Area Chpt.	40. WI Society of Ornithology	73. Lake Superior Greens	95. Hmong Association of Green Bay
Izaak Walton League—Sheboygan Co. Chpt.	41. WI Wildlife Federation	74. Last Wilderness Conservation Association	Resorts
Izaak Walton League—Watertown Chpt.	42. Wolf River Bass Club	75. Madison Audubon Society	96. Blueberry Hill Resort
Kendall Sportsman's Club	43. Yahara Fishing Club	76. Mid-West Renewable Energy Assn.	97. Chief Lake Lodge
Lancaster Co. Conservation Club	Lake Associations	77. Northern Thunder Partnership	98. Chippewa Pines Resort
Lincoln Co. Sports Club	44. Beaver Dam Lake Mgmt. District	78. Pollution Prevention Partnership	99. Ladwig's Pine Arbor Resort
Machickanee Sportsmens Club	45. Big Cedar Lake Assn.	79. POW'R (Protect Our Wolf River)	100. Loon's Nest Lodge
Mauston Bass Busters	46. Big Eau Pleine Citizens Organization	80. River Alliance of WI	101. Musky Shores Resort
Muskellunge Club of WI	47. Big Portage Lake Riparian Owner Assn.	81. Riverside Urban Environmental Center	102. Norwood Haven Resort
New Lisbon Sports Club	48. Chippewa Flowage Area Property Owner's Assn.	82. Sierra Club—Midwest	103. Pat's Landing Resort
Norwalk Rod and Gun Club	49. Foster Lake Assn.	83. Sierra Club—Great Lakes Program	104. Pinewood Lodge
Oconto Co. Sportman Alliance	50. Ike Walton Lake Assn.	84. Sierra Club—River Touring Club of the John Muir Chpt.	105. Reeder's Recess Resort
Olin-Badger Conservation Club	51. Lake Noquebay Rehab. District	85. Waukesha Co. Environmental Action League	106. Sandy Point Resort
Otter St. Fishing Club	52. Long and Bass Lake Assn.	86. Wisconsin's Environmental Decade	107. Sunset Lodge
Pewaukee Lake Sportsman's Club	53. Mead Lake Club		108. Tomah Ridge Resort
Red River Sportsman's Club	54. Miller Lake Assn.		109. Trails End Resort and Campground
Reel Hooked Fishing Team and Guide Service	55. Namakagon Lake Assn.		Other Organizations
Rick Writz Guide Service	56. Pike Lake Protection and Rehab. District		110. Madison Chpt. National Organization of Women
Rod-Bender Guide Service	57. Random Lake Assn.		111. Physicians for Social Responsibility
Sheboygan Co. Conservation Assn.	58. Snipe Lake Assn.		112. Random Lake Lions Club
Standing Cedars Community Land Conservation Assn.	59. Spider Chain O'Lakes Assn.		113. WI Committee on Occupational Safety and Health
	60. Tomahawk Lake P.O. Assn., Inc.		114. WI National Organization of Women
	61. WI Association of Lakes		
	Environmental Groups		
	62. Aldo Leopold Audubon Society		
	63. Citizens for an Independent DNR		



WISCONSIN'S ENVIRONMENTAL DECADE

September 15, 2000

Dear Secretary Meyer and the Natural Resources Board,

A petition was submitted to the Department of Natural Resources on May 18, 2000, requesting the adoption of rules to govern mercury emissions from the largest sources which contribute to mercury deposition to Wisconsin's lakes and rivers. Over three months and two Natural Resources Board meetings later, no action has been taken to reduce harmful mercury pollution. Imagine the number of anglers and their families who, because of a lack of awareness of the fish consumption advisory, ate mercury-contaminated fish and placed their health in jeopardy over the summer.

For a number of reasons listed in this letter, Wisconsin's Environmental Decade and other previous petitioners feel strongly that immediate action is needed to address and reduce mercury pollution. Therefore, we are submitting a second mercury petition with amendments and additional petitioners.

The most notable substantive amendment is the deadline by which mercury emitters must achieve 90% reductions-2010 instead of 2015. This change was made for a variety of reasons:

- Three out of four federal bills addressing mercury emissions have 2005 as the date for maximum reductions (making our request quite reasonable.)
- The EPA has identified a combination of control technologies that reduce mercury stack emissions by a minimum of 70%.
- Wisconsin Electric Power Company, as part of the XL Program, has pledged to voluntarily decrease mercury emissions by 40% in 2010. Only months ago, WEPCO testified against Senate Bill 177, which would have required a 50% reduction in the same time, claiming that no technology existed to reduce mercury from coal-fired power plant emissions.
- The National Academy of Sciences released a report in July estimating 60,000 children are born in the United States each year that may have neurological problems and difficulty in school because of their mother's consumption of mercury-contaminated fish. Further estimates using Wisconsin population numbers estimate that approximately 1200 of those children will be born into Wisconsin families. The estimate is likely conservative because of our massive concentration of lakes and our great fishing tradition.

For these reasons, the Great River Council of the Federation of Fly Fishers, the Anishinaabe Nijii/Protect the Earth W.A.T.E.R Campaign, the Green Bay Area Great Lakes Sport Fishermen, the Brown County Conservation Alliance, a DNR Certified Angling Instructor, Wisconsin Public Interest Research Group, and the River Alliance of Wisconsin join the previous petitioners in urgently requesting that rules to reduce mercury pollution from the largest sources be written quickly.

Sincerely,

Keith Reopelle, Program Director

122 State Street, Suite 200, Madison, WI 53703-2500 608.251.7020 .Fax 608.251.1655 .www.wienvdecade.org

Before The State of Wisconsin Department of Natural Resources

PETITION BY CITIZENS FOR THE ADOPTION OF RULES TO GOVERN MERCURY EMISSIONS TO THE AIR AND SPECIFICALLY REQUIRING REDUCTIONS FROM THE LARGEST SOURCES OF MERCURY EMISSIONS WHICH CONTRIBUTE TO MERCURY DEPOSITION TO WISCONSIN LAKES AND RIVERS

Citizen Petition for Rules Docket No. _____

TO: Secretary of the Department of Natural Resources, and the
Natural Resources Board
P.O. Box 7921
Madison, Wisconsin 53707

The undersigned citizens of the State of Wisconsin hereby petition the Wisconsin Department of Natural Resources (WDNR) and the Natural Resources Board to conduct rulemaking to adopt administrative rules which require the reduction of mercury emissions to the air, which are subsequently deposited in surface waters and bioconcentrate in game fish, from the largest known sources of such emissions under the authority given to the Department in section 285.11 (9) Wis. Stats.

This petition is filed pursuant to the provisions of 227.11 (2) (a) and 227.12 (1) and (2), Wis. Stats., and Wisconsin Administrative Code NR 2.05. A petition for rulemaking must state the substance or nature of the rule requested, the reason for the request, the petitioners' interest in the requested rule, and a reference to the agency's authority to promulgate the requested rule, 227.12 (2), Wis. Stats. This petition fulfills these requirements and describes why rules are urgently needed.

PETITIONERS

Petitioner Phil Emmmling joins in this petition as an angler and as the Vice President of the Great River Council of the Federation of Fly Fishers, whose membership is 800. Many anglers within the group fish for species that are not frequently affected by mercury, such as trout. However, largemouth and smallmouth bass are fished often, and also appear on every page of the Wisconsin fish consumption advisory for mercury. The group feels strongly that mercury reduction is essential to protect the health of people and fisheries.

Petitioner Sandy Lyon joins in this petition as Executive Director of Anishinaabe Nijii/Protect The Earth's W.A. T.E.R. Campaign, whose mission it is to bring together the Native and Non-Native communities to protect the earth for Seven Generations yet to come. Sandy is concerned that poor people are significantly more threatened by mercury poisoning because of their reliance on fresh fish for food. Specifically, Sandy has seen the Anishinaabe in Northern Wisconsin and the Lake Superior region eating a great deal of large game fish, like walleye, that are associated with high mercury levels. She feels that mercury warnings are inadequate, and that it is unjust to delay action that will make fish a healthy food source for all.

Petitioner John Durben joins in this petition as President of the Green Bay Area Great Lakes Sport Fishermen (GBABLSF) and individually as an angler spanning a period of over 45 years. John as well as members of GBABLSF have serious concerns about the poisoning of Wisconsin's lakes through the emission of mercury contaminants. They are concerned about the affects of the consumption of mercury-laced fish both for this generation and generations to come. They believe that now is the time to reverse the current trend and adopt rules that will have a positive affect on our environment.

Petitioner Ron Vander Loop joins in this petition individually as a Wisconsin fisherman and as president of the Brown County Conservation Alliance (BCCA). A special concern is what the results of mercury contamination will be on the reproductive capacity in fish, wildlife and humans in the future. Myself and the twelve member clubs of the BCCA strongly support the requested rules recognizing that they are critical to making sport fish safe for consumption.

Petitioner Pete Petrouske joins in this petition individually as a longtime Wisconsin angler with young grandchildren and in my capacity as a Wisconsin Department of Natural Resources Certified Angling Instructor who has taught fishing classes at two different schools in Green Bay. I am very concerned with the mercury contamination of fish in Wisconsin's waters. Sport fish must be made safe for consumption by our young anglers.

Petitioner Kerry Schumann joins in this petition as the Director of the Wisconsin Public Interest Research Group (WISPIRG). WISPIRG is a nonpartisan, nonprofit public interest organization advocating for a safe and healthy environment. WISPIRG is concerned about the impact mercury has on Wisconsin's environment and the health of Wisconsin's citizens. With a known 853 river miles and 117,000 lake acres under mercury advisory 1 Wisconsin is in need of strong rules to eliminate more mercury entering our environment. WISPIRG is particularly concerned with addressing the largest source of mercury contamination -coal-fired power plants. WISPIRG has about 15,000 members across the state of Wisconsin.

Petitioner Todd Ambs joins in this petition as an angler and as Executive Director of the River Alliance of Wisconsin, which has a membership of 1500 individuals and businesses that believe a healthy river is the heart of a healthy community. Segments of major rivers, such as the Wolf and Wisconsin, have mercury warnings for certain fish. Additionally, many of the rivers on the Impaired Waters List are so designated because of mercury. Reducing mercury emissions from the largest sources, coal-burning power plants, would help restore the health of these rivers while protecting others from future mercury pollution.

II. NATURE OF THE REQUESTED RULES

The petitioners request Wisconsin DNR and the Natural Resources Board to promulgate the following:

1) A rule which creates a comprehensive program in the DNR for addressing mercury in the environment including:

- mercury deposition and monitoring activities --other mercury research
- public information and education outreach in coordination with the Health Dept. --technical assistance for stationary sources of mercury
- cooperative mercury reduction activities with neighboring states and federal government
- activities to reduce mercury emissions from small (purposeful use) sources --activities to address problems associated with long-term storage of mercury --activities to address the effectiveness of this program for reducing mercury in the environment
- activities to minimize the release of mercury into the environment from coal ash and other solid waste streams
- any other component identified by the Department

2) A rule which requires the Department to appoint a mercury control council of up to 12 members, including representatives from environmental and sport fishing organizations, Native American tribes, health and industry professionals, for the purpose of advising the department on mercury reduction strategies and activities.

3) A rule which requires the Department to determine a baseline mercury emission level for each regulated source by averaging the annual mercury emissions in 1997, 1998 and 1999.

4) A rule which requires the Department to place a cap on 1999 emissions from each regulated and non-regulated source and not allow any new sources of mercury or modifications at existing sources which result in increased emissions unless that source obtains mercury emission reductions equal to 150% of the annual mercury emission increase.

5) A rule which requires the Department to require a 90% reduction in mercury emissions by the year 2010 from:

- all utility boilers with more than 10 pounds of mercury emissions in a year
- all government-owned boilers with more than 10 pounds of mercury emissions in a year
- all municipal waste incinerators --all medical waste incinerators --all chlor-alkali plants
- other sources of mercury air emissions the Department determines to be significant and reasonably (in terms of technology and cost-effectiveness) regulated. (Utility and government-owned boilers would not be required to reduce below 10 pounds of mercury emissions in a year.)

6) A rule which requires the Department to set any interim reduction requirements for regulated sources above that it deems useful including at least a 25% reduction by the year 2006.

7) A rule which requires fines and other disincentives for non-compliance with the caps and reductions required above.

8) A rule which allows that if the department, in conciliation with the Public Service Commission, determines that compliance with any of the reduction requirements is not technically feasible, would jeopardize electric reliability or cause unreasonable hardship, the department may issue a variance for up to 2 years from part or all of the requirement as long as the variance will not result in undue harm to human health or the environment.

III. REASONS FOR THE REQUEST

1) The Wisconsin Department of Natural Resources (DNR) and the Wisconsin Department of Health and Social Services (DHSS) jointly release an annual fish consumption advisory (Important Health Information For People Eating Fish From Wisconsin Waters) which currently warns anglers and their families to not eat certain fish from 341 lakes and rivers (approximately one out of every three tested) due to unsafe levels of mercury contamination. This list will continue to grow as the Department continues to test additional lakes. Approximately one out of every three lakes tested ends up on the advisory .

- 2) The Health Department warns pregnant women not to eat certain large game fish from all Wisconsin lakes that have not been tested. -
- 3) The most common fish species listed on the health advisory is walleye which is also one of the most sought after game fish for eating.
- 4) Mercury is a neuro-toxin which means that it adversely impacts the brain and nervous system making small children and pregnant women and their fetuses particularly susceptible to mercury poisoning.
- 5) Mercury stays in the body for a relatively long period of time (half life of 30 to 120 days) so that mercury contaminated fish meals eaten prior to pregnancy can impact the fetus.
- 6) Chronic exposure to mercury contaminated fish prior to or during pregnancy can result in infants and children with lower I.Q.s, reduced attention span, reduced memory capacity, reduced motor skills, and other mental and physical impairments.
- 7) Acute exposure to mercury contaminated fish prior to or during pregnancy can result in infants with severe mental and physical retardation.
- 8) Acute exposure to mercury contaminated fish in Wisconsin has led to at least one case of acute mercury poisoning where the individual, Henry Henk (Hayward), lost 100 pounds of weight, lost the use of his legs, suffered severe dementia (didn't recognize his own wife), and nearly died.
- 9) Fish consumption is the route of human exposure to mercury of greatest concern and there are currently no regulations of mercury emissions which take this route of exposure into account.
- 10) The presence of mercury in combination with other contaminants found in Wisconsin fish, such as PCBs, increases the likelihood of adverse health impacts at lower levels of mercury contamination.
- 11) Levels of mercury found in commercially sold fish in stores or restaurants (e.g. canned tuna) are, on average, about half of what they are in fish caught from Wisconsin waters listed on the health advisory. The fish consumption advisory assumes no consumption of commercially sold fish, underestimating the risk for anyone who does eat fish from the store or a restaurant.
- 12) The Department of Natural Resources sells over 1 million fishing licenses but only publishes 40,000 fish consumption advisories. The vast majority of anglers and their families never see the fish consumption warnings for mercury contamination.
- 13) The Environmental Protection Agency and Wisconsin DNR have identified coal-fired power plants as the largest sources of mercury emissions nationwide and in Wisconsin respectively. Yet, mercury emissions from coal-fired power plants are not meaningfully regulated.
- 14) The U.S. Environmental Protection Agency (EPA), Northeast States for Coordinated Air Use Management (NESCAUM) and other government agencies have identified numerous mercury removal control technologies currently available for electricity generating boilers including coal cleaning, wet scrubbers, dry scrubbers, fabric filters, combined ESP/baghouse and other combinations of existing technologies.
- 15) Studies have linked mercury contamination to impaired reproduction in wildlife, particularly loons and other fish-eating species.
- 16) In at least one DNR research project, reduced hatching success and reduced survival of embryos were associated with high mercury concentrations in walleye eggs from two northern Wisconsin lakes.

17) Nearly two million people fish in Wisconsin and spend nearly \$1 billion each year. In 1996, fishing license sales alone totaled \$26 million. More than 30,000 jobs in the state depend on sport fishing; sport fishing in Wisconsin depends on clean lakes, clean rivers and clean fish.

18) Certain cultures are at greater risk of adverse health impacts resulting from consumption of mercury contaminated fish due to their tendency to engage in semi- subsistence fishing. Certain Native American tribes, for example, rely heavily on game fish as a food source, as do certain Hmong communities.

19) More than 100 organizations have passed resolutions (see attached) supporting a policy to reduce mercury emissions in Wisconsin, including more than 40 sport fishing organizations, numerous lake associations, environmental groups, resort owners, Native American tribes and other groups representing communities of color which are disproportionately impacted by mercury contaminated fish.

20) Until states with the greatest mercury contamination in lakes and fish (e.g. Wisconsin), and therefore extensive fish consumption advisories, take action to reduce their own mercury emissions, there is little hope of receiving cooperation from upwind states with few, if any, fish consumption advisories (e.g. Illinois, Missouri, Texas, etc.).

IV. AGENCY AUTHORITY TO ADOPT REQUESTED RULES

The Department of Natural Resources is provided with direct and clear authority to promulgate the rules requested in this petition under 285.11 (9) Wis. Stats., which instructs the Department to "Prepare and adopt minimum standards for the emission of mercury compounds or metallic mercury into the air."

The bill which created this law was 1971 Assembly Bill 556, introduced by (then) Representative Tommy G. Thompson and two other legislators. The bill was clearly in response to high levels of mercury in Wisconsin River fish which prompted Governor Warren Knowles to close 40 miles of the Wisconsin River to fishing for two months in 1970.

The law created by this bill, Chapter 272, Laws of 1971, had three components: one restricting mercury discharges to the water, one requiring a materials balance sheet for purposeful use of mercury (addressing disposal), and a third (section 144.422) requiring that the department "prepare and adopt minimum standards for the emission of mercury compounds or metallic mercury into the air." This requirement creates clear and direct authority for the DNR to promulgate the rules requested in this citizens' petition.

The Department did adopt mercury air emission standards in response to the passage of this law. However, the current air toxics standards are intended, by design, to only address health impacts resulting from direct air inhalation of mercury, in fact, have resulted in no reductions of mercury air emissions. The Department has had the authority to promulgate mercury air emission rules addressing mercury contamination in fish for the last 29 years, but has failed to do so. This is not entirely surprising given the difference in the state of researchers' understanding of mercury in the environment between then and now. In 1971, researchers and policy makers alike had little idea of the role mercury deposition played in the contamination of fish. The fact that a mercury limit addressing inhalation has already been established by the Department in no way prevents the Department from establishing a stricter standard addressing air deposition and the fish consumption route of exposure. The Department clearly must address air deposition in order to protect human health, fish and wildlife since fish consumption is the exposure route of greatest concern on the part of state health officials.

Assembly Bill 556 (of 1971) as introduced, only addressed direct mercury discharges to the water. However, the Assembly Natural Resources Committee adopted a substitute amendment (which became law) which broadened the bill to include solid waste disposal and air emissions, recognizing, to some extent, that all mediums (water, air and land) are connected and affect each other. The substitute amendment was introduced by Representatives T. Thompson and L. Mittness.

The crux of the authority issue is that the law was clearly intended to reduce mercury levels in fish and clearly gave the department the authority to do this by regulating both water discharge and air emission sources of mercury. And, in fact, water discharge sources of mercury, whether from industries or from municipalities, have been, in a relative sense, greatly reduced; while air emission sources have gone completely unchecked. The fact that mercury levels in Wisconsin lakes and rivers have remained high (i.e. unsafe to the extent described in the state's fish consumption advisory) for the past 30 years is consistent with what we have learned about the role and importance of mercury deposition.

The DNR has clear, unquestionable statutory authority to adopt the requested rules. For the reasons set forth above, Petitioners urge that the requested rules be promulgated with all due expedience.

Dated this 18th day of September, 2000.

Respectfully submitted:

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